Data supplement to Ofori-Atta et al. Joining psychiatric care and faith healing in a prayer camp in Ghana: randomised trial**.** Br J Psychiatry doi: 10.1192/bjp.bp.117.200550

Online supplement DS1

Initiating the Collaboration

A distinctive challenge to implementing this study was establishing a partnership with the prophet who leads the prayer camp and defining the role of the research team in providing clinical care, conducting research, and making decisions about chaining. From the first contact, the prophet expressed interest in supporting an evaluation of the addition of medications to usual prayer camp intervention. In addition to offering clinical services the research team negotiated with local health officials to make health insurance available at no charge to all sanatorium residents. An additional incentive was the promise of making the camp a recognized model for others. As the study progressed the camp gained local recognition for having doctors consulting regularly. The research team was entirely responsible for medical care and it was assumed that as clinical status improved there would be less need for, and less use of, chaining. The medical team had no explicit role in making decisions about chaining or de-chaining patients as their health status improved.

Ethical Considerations.

Every effort was made to ensure that all study participants, as well as residents of the sanitarium who did not participate in the study, derived health benefits from this initiative. To this end, all inhabitants of the sanatorium were offered medical attention for diseases such as scabies, epilepsy, malaria, fever, etc. whenever staff were on site. At the beginning of the study, the District Health Management team inspected the Sanatorium. In addition, those in the control group were all offered the same treatment as the participants at the end of the 6-week duration of the trial.

In an effort to minimize human rights abuses the research team met at the end of each visit to discuss incidents of concern. The research team leader (A.O.-A.) discussed these incidents with the senior pastor responsible for the sanatorium and developed an intervention plan. Several workshops were held with prayer camp staff to educate them about the causes and types of mental illness, the nature of the recovery model, the importance of maintaining personal boundaries with patients, and the goal of reducing the need for, and reliance on, chaining. The goal of these workshops was to provide educational input in support of improving the quality of care and reducing human rights abuses.

Conducting research in a context of chaining and fasting

We believe that chaining and forced fasting are undesirable and that conducting research in an environment in which such practices take place may be questioned by some people on moral grounds. While making these judgments is beyond the scope of our research, in our view and that of the IRB that reviewed and approved the study, it was not wrong to conduct this research and we believed that substantial benefit would come from the conduct of the study. We believe that overall, all residents of the prayer camp benefited from the presence of the study team, that patients who received treatment benefited from it and that staff attitudes towards chaining were moderated. We hope additional benefit will come to Ghanaian society from its eventual publication. We did not believe that conducting this study would add any legitimacy or indicate any degree of advocacy and endorsement of chaining or fasting of people with mental illness in Ghana or anywhere else. We believe that as uncomfortable as the ethical issues may be to some, the provision of pharmacotherapy by professional staff in a prayer camp potentially enabled new learning where it was needed the most for prayer camp staff, for patients and their families, as well as for the District Health Management Team of the Ghana Health Service who had no previous involvement with the camp.

Consent. It was our experience and that of the team members working with us that participants understood the study, the potential risks and benefits, and that their participation was voluntary and that they understood that they could withdraw consent at any time. We believe that they gave informed consent. We acknowledge that it is difficult in any circumstance to be entirely sure that someone understands what has been explained to them, however carefully. These were people with serious mental illnesses, which may suggest that some may have not been fully capable of understanding some details. This is why, when we were not entirely sure that they had understood, or were capable of giving consent, we involved their families. Ghana, is a collective society in which, when a patient has a severe chronic illness, the extended family is often the only source of support. In the Ghana Medical and Dental Council’s appendix to its code of ethics, there is a special supplement guiding practitioners on how to balance confidentiality issues with the need to keep family engaged and informed in order to ensure that financial and other resources needed for treatment will continue to be provided by the family, as most people do not have health insurance or other means for paying for healthcare. Thus family is extremely important given the virtually complete dependence many patients have on their families for their very survival and care. In our experience key family members responsible for the participants in the study were capable of understanding the study, and did understand it. However, we do not have documented evidence as we did not set out to collect this data and were not required to do so by the IRB that approved the study. As with the participants themselves, it was the experience of the team that families also understood what they were giving proxy consent to. We acknowledge that we did not use objective procedures to assess the capacity.

Issues Concerning Chaining and the Mental Health Law of Ghana (Mental Health Act 846, 2012)

Prayer camp staff expressed concern that if unchained, participants would leave the camp, get lost and come to harm; that they would go back to using addictive substances that had contributed to their psychoses; or that they would be at risk of harm from others if they left in a psychotic state. Since the prophet and his staff formally welcomed the clinical team only for the purpose of conducting the research project, the researchers were not empowered to advocate as vigorously as they might have, for reducing the use of chains. If future initiatives are charged explicitly with reducing the use of chains, a written agreement expanding the role of medical personnel in chaining decisions would probably be needed. Such an intervention might also engender more resistance to such joint projects from prayer camp staff. Before this is possible, it is likely that more secure infrastructure appropriate for psychiatric populations will be needed, and, most likely, oversight by government health agencies. Given the stigma associated with mental illness, even by and towards mental health professionals, it is unlikely that local health administrators on their own, would take over this oversight without interventions such as the one studied here to rigorously demonstrate the effectiveness of collaboration between health professionals and prayer camp staff.

The recently passed Mental Health Law of Ghana (Mental Health Act 846, 2012) provides a framework which is intended to support the kind of collaboration evaluated here. The Act states that a person needing care cannot be held for longer than 72 hours before being taken to a licensed healthcare facility. In one possible model, psychotic or agitated visitors to religious programmes can be referred to nearby hospitals and/or community psychiatric nurses for acute care until they no longer need to be chained. Thereafter, faith healing camps could provide care with professional oversight of medication along with follow-up clinical care. Studying the Bible and teaching of the Word could be freely encouraged. The local District Health Management Team may need to extend its oversight to these camps, providing standards, infrastructure and care.

How can undesirable activities be further addressed? We think the meetings we described, the respectful exchanges of views, and the overall interactive process over years led to increased trust and mutual understanding. We think more of that kind of interaction would facilitate forward movement. Changes in laws in Ghana and policies are also likely to have a role, but as researchers, those domains are beyond our expertise and authority, except in that we design studies that show policymakers what is possible.

**Table DS1** (Supplemental Table 1, on next page)Side-effects identified using the Udvalg for Kliniske Undersøgelser (UKU) for participants in the intervention group, weeks 2–6